

MUSEUM NOTES

CLASSES visiting the Museum recently were from Crane Country Day, Ballard and Solvang, Franklin, Harding, McKinley and Wilson schools.

SANTA BARBARA COLLEGE GROUPS:

The visual education group met with Mrs. Cooke and Mr. Rett to study methods of exhibition.

The Native Plants and Animals Class visited the Museum Library.

Mr. Rett talked on mammals and birds to Mr. Wells' class.

THE CAMP STAFFS of the Santa Barbara Rocky Nook and Mt. Pinos San Emigdio groups of Girl Scouts met with Mrs. Cooke for a nature course at the Museum on May 29.

LEAFLET SALVAGE. Back issues of the *Museum Leaflet* are needed for the Museum Library's diminishing files.

GIFTS AND ACCESSIONS

The Museum gratefully acknowledges the following gifts and accessions:

ANIMALS—Mrs. Byron Abraham, Mr. James Edwards, Mr. C. F. Levine, Mr. Ian I. McMillan, Tommy and Bobby Petersen, Seaman Walker.

BOOKS, PAMPHLETS, MAGAZINES, ETC.—Mrs. Byron Abraham, Mr. Frank Bishop, Dr. Marian O. Hooker, Mr. R. A. Johnson, Mr. David B. Rogers.

CUT FLOWERS AND HERBARIUM SPECIMENS—Mrs. J. Odell Figg-Hoblyn, Mrs. Max C. Fleischmann, Mr. E. O. Orpet, Mrs. Roy Wheeler.

AQUARIUM—Dr. John C. Grim.

SHARK EGG CASES—Steinhart Aquarium.

TWO DOLLS FROM GUATEMALA—Mrs. Charles Gilchrist.

SANTA BARBARA MUSEUM OF NATURAL HISTORY

SANTA BARBARA • CALIFORNIA

AN EDUCATIONAL ORGANIZATION
DEVOTED TO THE STUDY, DISPLAY, AND INTERPRETATION
OF THE FAUNA, FLORA, AND PREHISTORIC LIFE
OF THE PACIFIC COAST



MUSEUM LEAFLET

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SANTA BARBARA MUSEUM OF NATURAL HISTORY

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*On leave.

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SAN NICOLAS ISLAND EXPEDITION

OFF shore islands have intrigued naturalists ever since the days of Charles Darwin and Alfred Wallace and the Channel Islands, off the coast of southern California, have occupied a prominent place in the Museum's work during the past twenty years. David B. Rogers conducted archaeological fieldwork there a number of years ago, Mr. Rett has collected birds and mammals from time to time, papers on the geology of Santa Cruz and San Miguel were published*, and Ralph Hoffmann, a former director of the Museum, was working intensively on the island herbarium when he was killed on San Miguel while collecting a rare plant growing on a precipitous cliff.

Mr. Orr's plans for island fieldwork were halted at the beginning of the war and were thought to be suspended for its duration until an unexpected opportunity presented itself this spring. Lt. C. W. Stukey began coming to the Museum to find out about the Indian remains he was finding while stationed on San Nicolas Island. Before long Mr. Orr was asking the questions which brought about the sanction of Rear Admiral A. D. Bernhard, Lt. Commander D. O. Parker, Commanding Officer, San Nicolas Island, and Lt. George E. Chaquet, Executive Officer, regarding an expedition.

Probably no one has had such an ideal chance to give San Nicolas or any of the other islands the scientific once-over, first by plane and then by jeep. During a three day visit Mr. Orr made a preliminary survey of the island and what the situation would require for down-to-earth fieldwork. A week later he returned to the island with Mr. Rett by plane. The field equipment, including the "calf dozer" and power screen, followed by Navy boat.

Mr. Rett was impressed by the contrast with the conditions of his former island experiences. Fieldwork was never like

*Bremner, Carl St. J., *Occasional Papers 1 and 2*, 1932 and 1933.

this. The set-up was something a scientist might have put in his pipe dream of the world of tomorrow.

The dreaded fifty miles of unpredictable ocean was covered by plane in about thirty minutes. The usual tedious details of making camp, meals, supplies, and maintenance, which are apt to limit or at least slow down the progress of an expedition, simply didn't exist because they were guests at the officers' quarters. They had access to several means of transportation to suit the occasion and interested men off duty were always ready to help. The assistance and Indian material contributed by Carl Stukey and Melborn Wylie were particularly valuable.

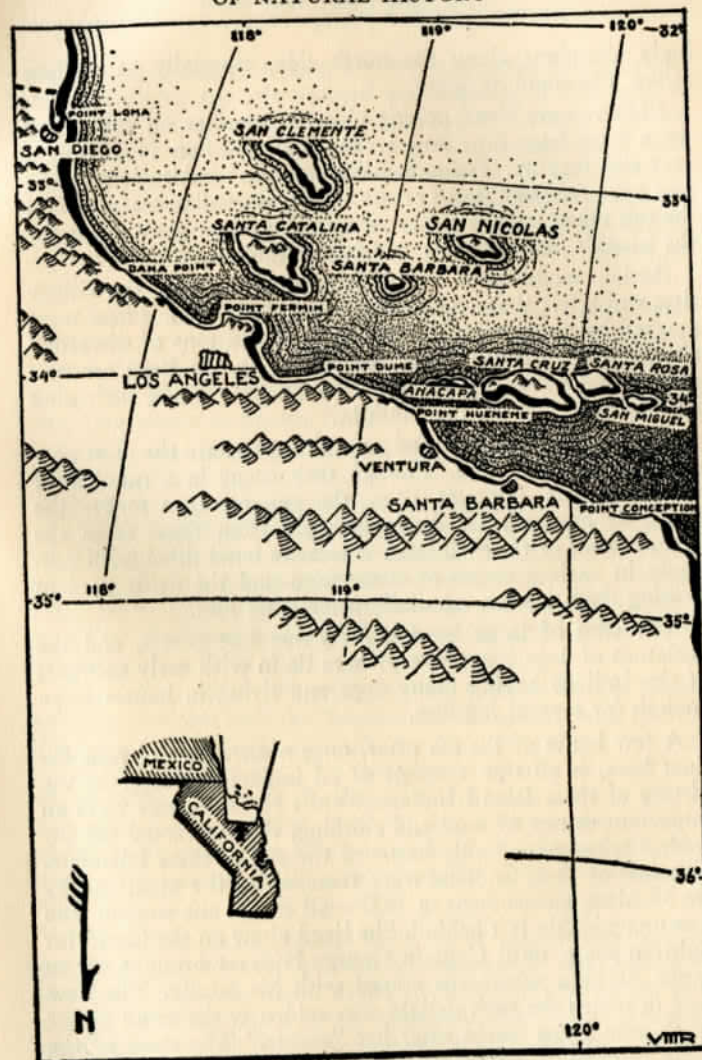
The expedition created considerable interest among the men stationed on the island and Mr. Orr and Mr. Rett were invited to give a talk. Since most of them pine for the cities of the mainland, they hooted when Mr. Rett began by saying he had been trying for the past twenty years to get to San Nicolas.

The audience was actively interested and at the end many stayed on to ask questions and some brought parts of their private collections of rocks, shells, and so on to get the opinion of the experts. This impromptu program not only served as an evening's entertainment for the stranded men, but it helped to relieve the everyday monotony by revealing what an interesting place the island is. In this way the Museum's program of educational service to the armed forces was carried even a little way into the Pacific.

San Nicolas is eight and a half miles long, reaches an elevation of 907 feet, and is shrouded in fog much of the time. It lies farther out to sea than most of the Channel Islands and is unprotected by the eastward curve of the mainland coast south of Point Conception.

Windswept, indeed, are the desolate features of San Nicolas. Howling while it works, the wind is forever changing the details—sweeping sand away here, piling it up there, eroding and sandblasting deeper cuts in the rock and shellmounds, and laying bare the contents of ancient Indian graves.

Barren as much of the island is—with badlands like South Dakota and desert sand dunes, the water supply is surpris-



CHANNEL ISLANDS OF CALIFORNIA

ingly abundant along the north side, especially at a place called Thousand Springs.

Indians have lived at one place or another on the island for a very long time and archaeologically San Nicolas is a very rich locality. The expeditions of other institutions in the past have removed much of the readily accessible material and the toll taken by pot-hunters would be greater were it not for the island's inaccessibility and inhospitable weather.

Aerial reconnaissance made it possible to locate the village sites and select those for immediate investigation. These were marked by huge mounds made by tons and tons of discarded abalone shells. Some were located far up the steep terraces and the loose shells lie strewn about on the surface, their pink iridescence catching the sunlight.

Abalone shell fishhooks of a peculiar style are the most conspicuous artifact there. Though they occur in a number of variations and different sizes, the general type makes the hooks of San Nicolas distinguishable from those from the other islands or the mainland. A steatite bowl filled with fishhooks in various stages of completion and the drills used in making them was an especially interesting find.

The sites of large houses, forty-five feet across, and the skeletons of dogs found everywhere tie in with early accounts of the Indians having many dogs and living in houses large enough for several families.

A few bones of the sea otter, once numerous and now extinct here, is all that remains of an important factor in the history of these Island Indians. While the sea otters were an important source of food and clothing, they attracted the fur traders who undoubtedly hastened the end of these Islanders. The last of these Indians were removed to the mainland by the Mexican government in 1835—all except one woman who was unavoidably left behind. She lived alone on the island for eighteen years, until Captain George Nidever brought her to Santa Barbara where she stayed with his family. The new food in which she took delight was evidently the cause of her death only seven weeks after her "rescue." The story of the Lone Woman of San Nicolas has been the island's chief claim to popular fame.

Strange looking root casts which preserve the root forms of vanished plants are left exposed and standing in the sand on both San Nicolas and San Miguel, and indicate that the island has not always been treeless. The quantities of land snails, whose empty shells are everywhere, must have had more vegetation to feed upon. The tallest plants on the island are the tree lupine and coyote brush growing in the shelter and moisture of the canyons where they reach a height of ten feet.

It is impossible to say now what land animals and plants have become extinct on the island. Whether fossil pigmy elephants, like those on Santa Rosa and San Miguel, will turn up on San Nicolas is just one of the paleontological questions Mr. Orr wants to pursue further.

Islands always bring to a naturalist's mind the question of endemic species—those plants or animals which are found exclusively in a given place. Island endemics not only supply significant data for studying processes of evolution, they often hold key positions in reconstructing the geological history behind the present distribution of animals and plants. The affiliations of island and mainland species may help in estimating when the island was a part of the mainland and just what its connections have been.

The only reptile on San Nicolas is a species of night lizard which occurs also on San Clemente and Santa Barbara Island. The only native land mammals are the little island fox and the white footed mouse. The two island endemic birds are the island horned lark and the San Clemente house finch, which was taking full advantage of the barracks—building nests under eaves and every other nestable place. In general, the birds were nesting about a month earlier than on the mainland.

The spring season appears to be longer there than on the mainland. Mr. Orr noted when he went out in late February that the wildflowers there were in full bloom while they had not yet begun to bloom on the mainland. The island plateaus were carpeted with fields of cream cups and goldfields. When the expedition left in April, the island flora was still green but the mainland hills were already turning brown.

Much remains to be done to round out the Museum's work on San Nicolas. There was little time to collect plants or to consider the abundant marine life surrounding the island and the sea lion rookeries were located where military restrictions prevented their investigation.

Mr. Rett plans to submit to *The Condor* his observations of the birds and Mr. Orr will report on his findings and pursue a number of interesting topics which the San Nicolas material suggests to him.

In terms of material collected, observations made, and kodachromes and movies taken, a remarkable amount of work was accomplished on this expedition and this was made possible entirely through the Navy's splendid facilities and cooperation.

M. C. I.

Map by Virginia More Roediger.

BOREIN ETCHINGS

Following the death of Edward Borein on May 19 a memorial exhibit of his etchings was arranged in the Auditorium. These were selected from one of the most complete collections of Borein etchings, which was made by the late Francis E. Bliss and presented to the Museum in 1929 along with a library of the West.

Mr. Borein was self-taught and drew what he saw and knew intimately. He captured the spirit of the old West with an accuracy which satisfies historian, ethnologist, cowboy and draftsman alike. Through the excellence of his work a wider appreciation of the West's romantic and colorful past has been sown.

His Indian subjects ranged through the American plains from Canada to Mexico and included the Blackfeet, Crow, Sioux, Flathead, Cheyenne, Umatilla, Navajo, and the Pueblo Indians of Walpi, Laguna, Oraibi, Acoma, and Taos.

Many of his etchings are of the old Spanish missions and churches of California. Horses, drawn only as one who understands them could, and scenes of the range are among his most popular work. Executed with an exacting eye for detail these were plainly done for the love and the fun of it.

SEED PAINTINGS

The unusual landscapes exhibited in the Flower Hall have been attracting much interest because of their novelty and effectiveness. They were made by Mrs. Ellen Cunnane of Ventura whose daughter, Mrs. Carroll Wright, brought them to the Museum. The pictures have the quality of tapestry or old needlework samplers but are made of seeds applied with glue to a paper background. The hobby grew from the seeds in Mrs. Cunnane's garden. As she gathered seeds she saw in them soft colors and textures which she began working into pictures. Her palette consists of tiny boxes of seeds and now many kinds have been added until there are more than a hundred. She has learned to blend these for desired colors and textures. Some of these boxes of seeds are shown with the seed paintings and make an interesting companion to the exhibit of seed dispersal.

SHIP MODELS

The twenty-one ship models made by the late Mr. Joseph Weston comprise one of the finest collections on the West Coast. They were lent to the Museum by Mrs. Weston and when they were shown a year and a half ago they aroused so much interest that they are being exhibited again in the patio.

The models, which average about thirty inches in length, represent the story of shipping from the prehistoric raft and dugout to the first steamship "Clermont" 1807 and include an Egyptian ship 3000 B.C., Phoenician and Greek biremes a Roman trireme, Aztec galley, Chinese junk, Carthaginian and Viking ships, a galleon of the Spanish Armada, the "Santa Maria"—a caravel, the Dutch "Half-Moon," the merchantman "Mayflower," HMS "Victory," "Constitution," and an American clipper.

CHILDREN'S PROGRAM

The Junior Department's annual program was held in the Auditorium on May 25. The audience of parents and friends was greeted by Major Fleischmann and Mr. Coggeshall presented diplomas to eight graduating Junior Naturalists—Patsy Albright, Ann Bergen, Mona Carrillo, Barbara Jobbins, Claire Swan, Joanie Wootton, Jack Morley, and Robert Rosenberg, several of whom later in the program explained the movies featuring favorite pets in the Zoosseum.

A series of kodachrome slides, each of which had been featured during the year in the weekly "quests," were accompanied with short talks by Wanda Durflinger, Ronald Everman, Walter Hanson, Barbara Moore, Jackie Ward and Edward York of the sixth and seventh grade class.

The guests were invited to visit the Junior Department where the children were in charge of explaining their work on display there. There were peepshows—miniature habitat groups of California animals in their natural settings—and dioramas of interesting and vanishing wild life from coast to coast including sea otters, condors, beavers, and mountain sheep and goats. Three exhibits made by the fourth and fifth grades illustrated books which had been read to them during the year—"Presents for Lupe," a squirrel from South America, "Sea Horse Adventure," and the perennial favorite "Down Comes the Wilderness." Other exhibits showed methods of using plaster casts in museum work, pottery made in the manner of the Pueblo Indians, and drawings made from the reproductions of Navaho sandpaintings which had been on exhibit in the Museum. Some of the children answered questions about the pets which always arouse lively interest. In addition to Kinky the kinkajou, Panchita the coati-mundi, the rabbits, guinea pigs, snakes, fishes, and marine aquarium, there were three new baby skunks which amused everyone.

After refreshments served under the oaks, the graduates left with Mrs. Cooke and Miss Wheeler for a special week-end trip to White Oaks Flat Camp on the Santa Ynez River where they had a wonderful time.

MAJOR FLEISCHMANN HONORED

Max C. Fleischmann, president of the Museum, was awarded an honorary degree of Doctor of Laws by the University of Nevada on May 14 in recognition of his contributions toward the educational and civic life of Nevada. He has been interested in the University of Nevada for several years, has provided scholarships for many worthy students there and recently gave his 250 acre dairy farm near Reno to the University to be used as an experimental farm. For many years on the National Council of Boy Scouts, he is a member of the Council for the Nevada Area. Since establishing residence in Nevada he has been director general of the Nevada State Museum, Carson City.

INSTITUTE OF NATURAL SCIENCE August 13-31

The Role of Natural Resources in War and Post War Education is the theme for the Institute of Natural Science. This three week post-session of the Santa Barbara College summer session may be taken with or without the three units of college credit. The Institute will consist of field observation, laboratory demonstration and group discussions under the direction of a faculty of specialists. The course of study will deal with the conservation of living and physical resources and the way in which education is meeting current needs. Under the direction of Dr. Robert W. Webb of UCLA and Mr. Harrington Wells and Mr. C. Douglas Woodhouse of the Santa Barbara College, the program will include lectures by Dr. Lewis C. Carson, Miss Pearl Chase, Dr. Willard L. McRary, Dr. Hazel Severy, Dr. Homer L. Schantz, Mr. Maunsell Van Rensselaer and, from the Museum staff, Mr. Coggeshall, Mrs. Cooke and Mr. Rett.

The classes will be held in the mornings at the Museum following registration at the College on August 13 with a tuition fee of \$15.